

PCT/PTO 24 MAR 2006

CIGARETTE PACKETS

5 This invention relates to a cigarette packet of box shape and of the type having a holder for cigarettes with a lid hinged thereto and normally closed and for opening to reveal the top of the holder and any cigarettes held therein. An inherent problem for cigarette smokers is not having means to light a cigarette when the desire to smoke is present caused by forgetting to lift a packet of matches or a lighter simultaneously with
10 the packet of cigarettes, or the matches running out or the fuel in the lighter running done.

An object of the present invention is to obviate or mitigate the problem.

It is known to have a book of 'safety' matches in which one or more plates of matches are provided. The plates are each formed from sheet material, such as
15 cardboard, with a series of parallel cuts to form individual matches which are rooted to a cross-band at one end and have a hardened inflammable substance at the opposite end or head, such substance only being ignitable on striking against a striker pad. The substance forms a bulbous head. The plates are encased in a cover, the bottom of which overlies the cross-band on the front of the plate(s), with the remainder extending
20 up the back of the plate(s) to be folded over the top or heads of the matches and clipped in behind the bottom of the cover. A striker pad is provided on the cover across the front or the back of the bottom of the book. A match to be ignited is torn from the cross-band and ignited by striking the head against the striker pad.

Accordingly, a first aspect of the present invention is a plate of matches for use
25 with a cigarette packet in which the plate is formed from sheet material with a series of parallel cuts to form individual matches similarly rooted at one end to a cross-band and having a hardened inflammable substance at the other end or head wherein the hardened inflammable substance on the head of each match is a thin coating of

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substance, there being two strike pads provided in a manner in which they are adapted to be opposed whereby the head of a match, torn from the plate, is locatable between the striker pads and with the pads adapted to be held together, the match can be pulled outwardly to ignite the substance.

5 Preferably, the plate fits inside a holder of the cigarette packet between the holder and wrapping around any cigarettes.

 Preferably, also the striker pads are parallelly spaced apart on an extension of the plate, there being a fold between the striker pads.

 Accordingly, a second aspect of the present invention is a cigarette packet
10 having a holder and one or more plates of matches, the or each being formed from sheet material with a series of parallel cuts to form individual matches similarly rooted at one end to a cross-band and having a hardened inflammable substance at the other end or head wherein the hardened inflammable substance on the head of each match is a thin coating of substance, there being two striker pads provided in a manner that
15 they are adapted to be opposed and held together whereby the head of a match, torn from the or one plate, is locatable between the striker pads and with the striker pads adapted to be held together, the match is pulled outwardly to ignite the substance.

 Preferably, one plate is provided having one striker pad and is secured to overlie one face of the holder and the other striker pad is provided on the holder.

20 Alternatively, one plate is provided with both striker pads provided on the holder.

 Further alternatively, both strikers pads are provided on the or each plate, the striker pads being parallelly spaced apart on an extension of the or each plate, there being a fold between the striker pads.

25 Embodiments of the present invention will now be described, by way of example, with reference to the accompanying diagrammatic drawing(s), in which:-

Fig. 1 is a perspective view of the cigarette packet, when closed, according to a first embodiment of the present invention, the view showing a plate secured to a back of the holder of the packet with a cross-band adjacent to a hinge between a holder and a lid and the match heads at the bottom of the back, and two striker pads, a first
5 provided on the lid and a second on the holder on each side of the hinge;

Fig. 2 is a perspective view of the cigarette packet shown in Fig. 1 opened with the lid and first striker pad overlying the holder and second striker pad, a match being shown having ignited by being pulled from between the opposed striker pads when held together;

10 Fig. 3 is a perspective view of the cigarette packet according to a second embodiment, the view showing a plate secured to a front of the holder with a cross band adjacent to the hinge, the plate having a flap hinged to the cross-band with a first striker plate being provided on the inside face of the cross-band with a second striker pad being provided on the front of the holder at a position to be opposed to the first
15 striker pad when the plate lies against the holder;

Fig. 4 is a perspective view of the cigarette packet as shown in Fig. 3, with the plate of matches held down with the two striker pads held together and a match being shown having ignited by being pulled out from between the opposed striker pads;

Fig. 5 is a perspective view of the cigarette packet according to a modified
20 second embodiment in which the plate of matches has its flap secured to the back of the holder with similarly positioned striker pads;

Fig. 6 is a perspective view of the cigarette packet as shown in Fig. 5 with the plate of matches held down with the two striker pads held together and a match being shown having ignited by being pulled out from between the opposed striker pads;

25 Fig. 7 is a perspective view of the cigarette packet according to a third embodiment, the view showing the plate of matches secured to the side of a holder,

and hinged for the plate to overlie the front of the holder, a panel being provided at the side of the matches near the bottom of the holder, the panel being separate from the matches and similarly hinged to the holder, a first striker pad being provided on the reverse of the panel with the second striker pad being provided at the bottom of the front face of the holder;

Fig. 8 is perspective view the cigarette packet shown in Fig. 7 with the panel being held down against the holder and a match being shown having ignited by being pulled out from between the opposed striker pads;

Fig. 9 is a perspective view of the cigarette packet according to a fourth embodiment in which the striker pads are provided at the interface between the holder and the lid as shown;

Fig. 10 is a perspective view the cigarette packet shown in Fig. 4 with the holder and the lid held shut and a match being shown having ignited by being pulled out from between the opposed striker pads;

Fig. 11 is a perspective view of the cigarette packet according to a fifth and simplified embodiment in which the plate of the matches is located inside the holder to the back of internal packaging for the cigarettes; and

Fig. 12 is a perspective view of the cigarette packet shown in Fig. 11 with the plate shown above the cigarette packaging.

Referring to Figs. 1 to 8 of the drawings, a cigarette packet of the type having a holder for cigarettes with a lid hinged thereto and normally closed is provided to one face of the holder 10 a plate 14 of matches 16 is secured. The plate 14 is formed from sheet material, such as cardboard, with a series of parallel cuts to form individual matches 16 which are similarly rooted to a cross-band 22 at one end and have a hardened inflammable substance at the other end or head. The hardened inflammable substance of the heads 24 of the matches 16 is only a thin coating, the coating being

printed thereon. Two striker pads 18, 20 are provided on the packet in a manner that they can be opposed and held together whereby the head 24 of the match 16, torn from the cross-band 22 of the plate 14, can be located between the pads 18, 20 and with the pads 18, 20 held together, the match 16 can be pulled outwardly to strike it
5 and ignite the substance.

Different embodiments of the cigarette packet will be described herebelow in which like parts will be referred to by like numerals.

In a first embodiment as shown in Figs. 1 and 2, the cigarette packet has the plate 14 secured to a back of the holder 10 of the packet with the cross-band 22
10 adjacent to a hinge between the holder 10 and a lid 12 and the match heads 24 at the bottom of the back. The two striker pads are provided the first 18 on the lid 12 and the second 20 on the holder 10 on each side of the hinge. In use, the cigarette packet is opened with the lid 12 and first striker pad 18 overlying the holder 10 and second striker pad 20. A match 16 is torn from the cross-band 22 and ignited by being placed
15 between the two pads 18, 20 and pulled from between the opposed striker pads when being held together.

In a second embodiment as shown in Figs. 3 and 4, the cigarette packet has a plate 14 secured to a front of the holder 10 with a cross-band 22 adjacent to the hinge. The plate 14 has a flap 26 hinged to the cross-band 22 with a first striker plate 18 being
20 provided on the inside face of the cross-band 22 with a second striker pad 20 being provided on the front of the holder 10 at a position to be opposed to the first striker pad 18 when the plate 14 lies against the holder 10. In use, with the plate 14 of matches 16 held down with the two striker pads 18, 20 held together, a match 16 having been torn from the cross-band 22 is ignited by being pulled out from between the opposed
25 striker pads;

In a modified second embodiment as shown in Figs. 5 and 6, the plate 14 of matches 16 has its flap 26 secured to the back of the holder 10 with similarly positioned striker pads 18, 20. With the plate 14 of matches 16 held down with the two striker pads 18, 20 held together, a match 16 is ignited by being located between and pulled
5 out from between the opposed striker pads.

In a third embodiment as shown in Figs. 7 and 8, the cigarette packet has its plate 14 of matches 16 secured to the side of a holder 10, and hinged for the plate 14 to overlie the front of the holder 10. A panel 28 is provided at the side of the plate 14 near the bottom of the holder 10. The panel 28 is separate from the matches 16 and is
10 similarly hinged to the holder 10. A first striker pad 18 is provided on the reverse of the panel 28 with the second striker pad 20 being provided at the bottom of the front face of the holder 10. In use, with the panel 28 being held down against the holder 10, a match is ignited by being pulled out from between the opposed striker pads 18, 20.

In a fourth embodiment as shown in Figs. 9 and 10, the striker pads 18, 20 are
15 provided at the interface between the holder 10 and the lid 12. In use, with the holder 10 and the lid 12 held shut, a match 16 is ignited by being pulled out from between the opposed striker pads 18, 20.

In a fifth and simplified embodiment as shown in Figs. 11 and 12, the plate 14 of the matches 16, separate from the holder 10 of the packet, is located inside the holder
20 10 to the back of the internal packaging 32 for the cigarettes. The internal packaging normally is foiled paper wrapped around the cigarettes, a front portion being removable on opening the packet for access to the cigarettes. Fig. 12 shows the plate 14 above the cigarette packaging 32. The plate 14 in this embodiment has a hinged flap 26 which inside the packet overlies the packaging as shown in Fig. 11, striker pad 18
25 being on the inside face of the cross-band 22 and striker pad 20 being provided on the inside face of the flap 26. As in previous embodiments, the pads 18, 20 are brought

together with the head of a match therebetween and pulled out to be ignited. If desired, the plate in all embodiments can be of the same material as the card forming the packet, can be coloured and printed or foiled and printed to match the appearance of the cigarette packet.

- 5 Variations and modifications can be made without departing from the scope of the invention described above and as claimed hereinafter.

CLAIMS

1. A plate of matches in which the plate for use with a cigarette packet is formed from sheet material with a series of parallel cuts to form individual matches
5 similarly rooted at one end to a cross-band and having a hardened inflammable substance at the other end or head wherein the hardened inflammable substance on the head of each match is a thin coating of substance, there being two striker pads provided in a manner in which they are adapted to be opposed whereby the head of a match, torn from the plate, is locatable between
10 the pads and with the pads adapted to be held together, the match can be pulled outwardly to ignite the substance.
2. A plate of matches as claimed in Claim 1, wherein the plate fits inside a holder of the cigarette packet between the holder and wrapping around any cigarettes.
15
3. A plate of matches as claimed in Claims 1 or 2, wherein the striker pads are parallelly spaced apart on an extension of the plate, there being a fold between the striker pads.
- 20 4. A cigarette packet having a holder and one or more plates of matches, the or each being formed from sheet material with a series of parallel cuts to form individual matches similarly rooted at one end to a cross-band and having a hardened inflammable substance at the other end or head wherein hardened inflammable substance on the head of each match is a thin coating of
25 substance, there being two striker pads provided in a manner that they are adapted to be opposed and held together whereby the head of a match, torn

from the or one plate, is locatable between the striker pads and with the pads adapted to be held together, the match is pulled outwardly to ignite the substance.

5 5. A cigarette packet as claimed in Claim 4, wherein one plate is provided having one striker pad and is secured to overlie one face of the holder and the other striker pad is provided on the holder.

10 6. A cigarette packet as claimed in Claim 4, wherein one plate is provided with both striker pads provided on the holder.

15 7. A cigarette packet as claimed in Claim 4, wherein both striker pads are provided on the or each plate the striker pads being parallelly spaced apart on an extension of the or each plate, there being a fold between the striker pads.

8. A plate of matches substantially as hereinbefore described with reference to Figs. 1 and 2, or Figs.3 and 4, or Figs. 5 and 6, or Figs. 7 and 8, or Figs. 9 and 10 of the accompanying drawings.

20 9. A cigarette packet having one or more plates of matches substantially as hereinbefore described with reference to Figs. 1 and 2, or Figs.3 and 4, or Figs. 5 and 6, or Figs. 7 and 8, or Figs. 9 and 10 of the accompanying drawings.

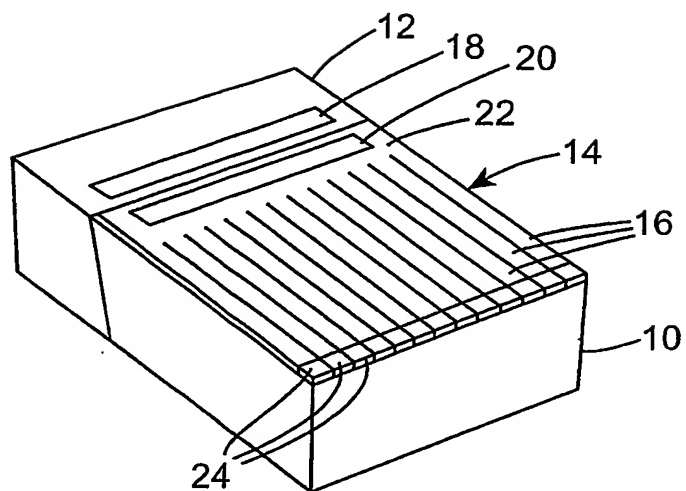


Fig. 1

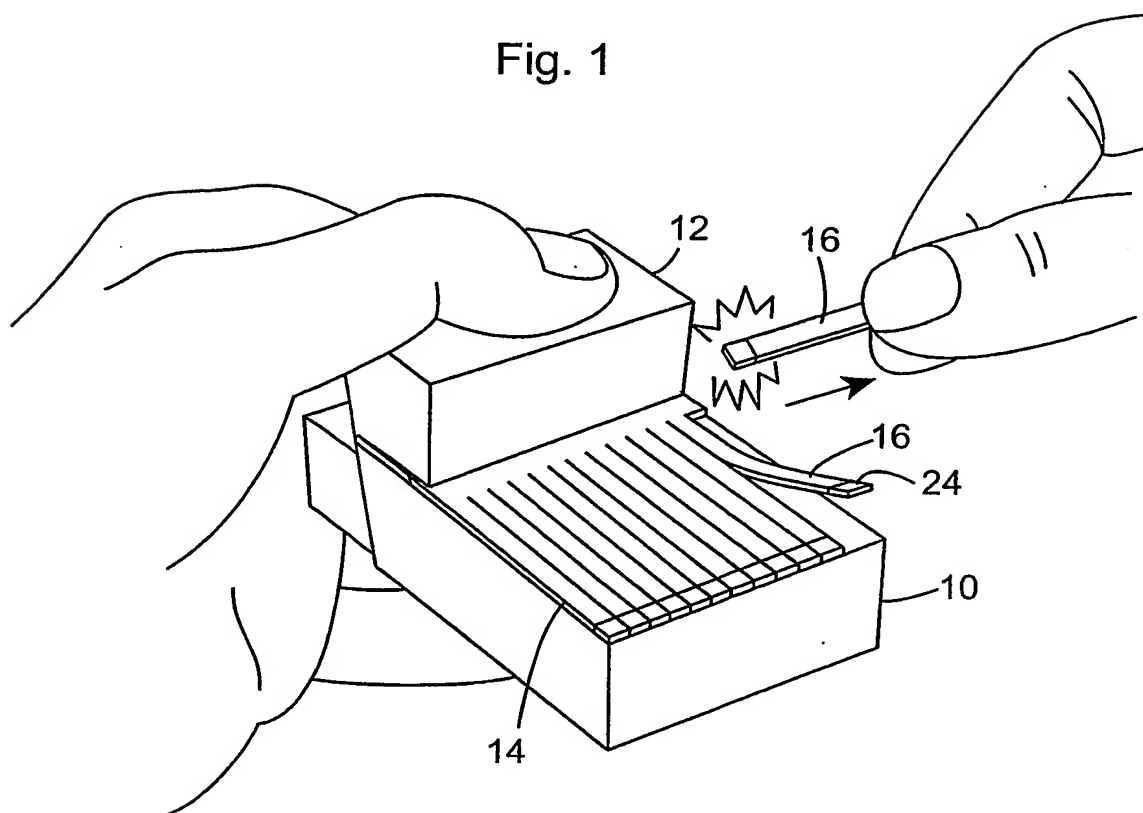


Fig. 2

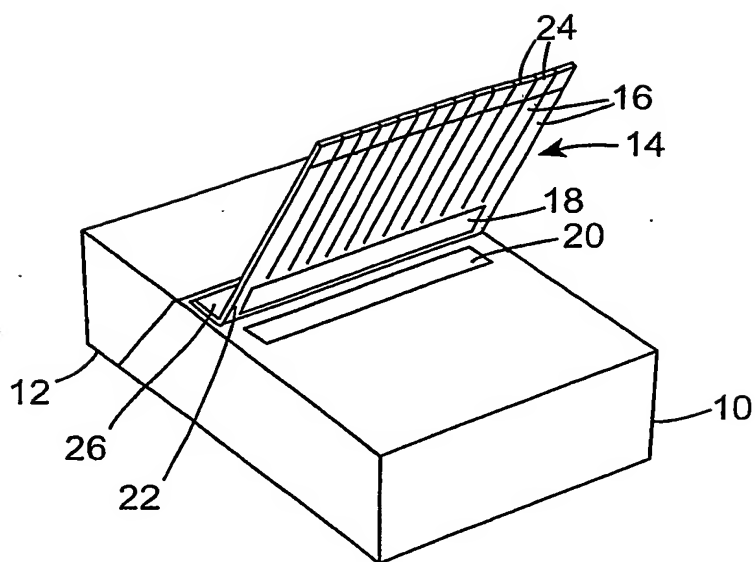


Fig. 3

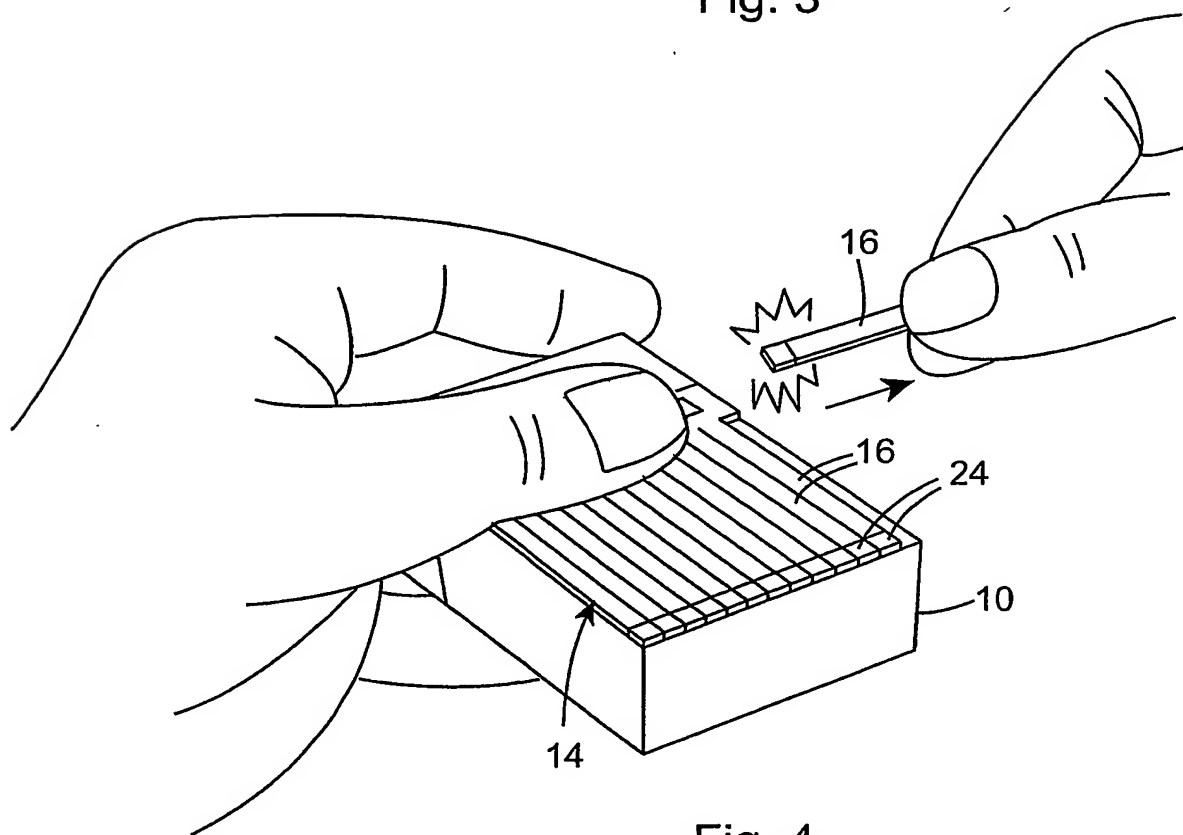


Fig. 4

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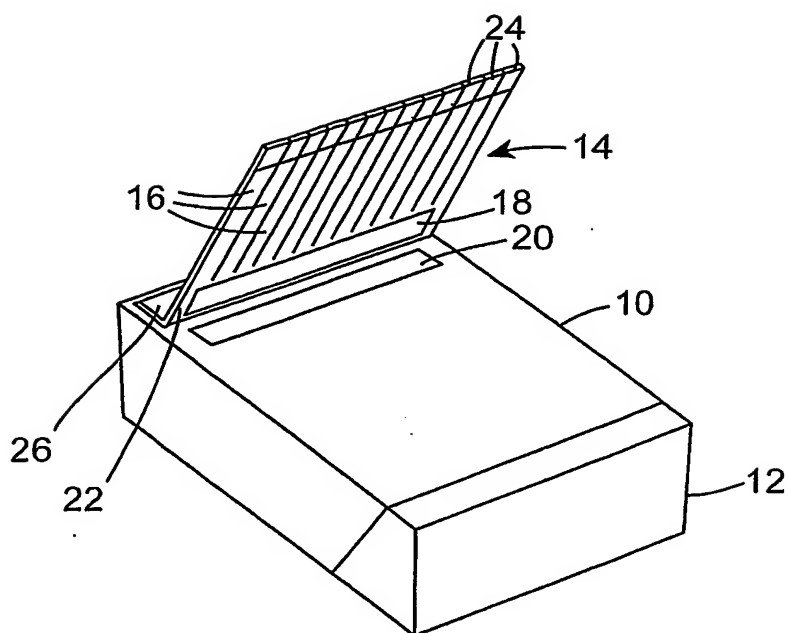


Fig. 5

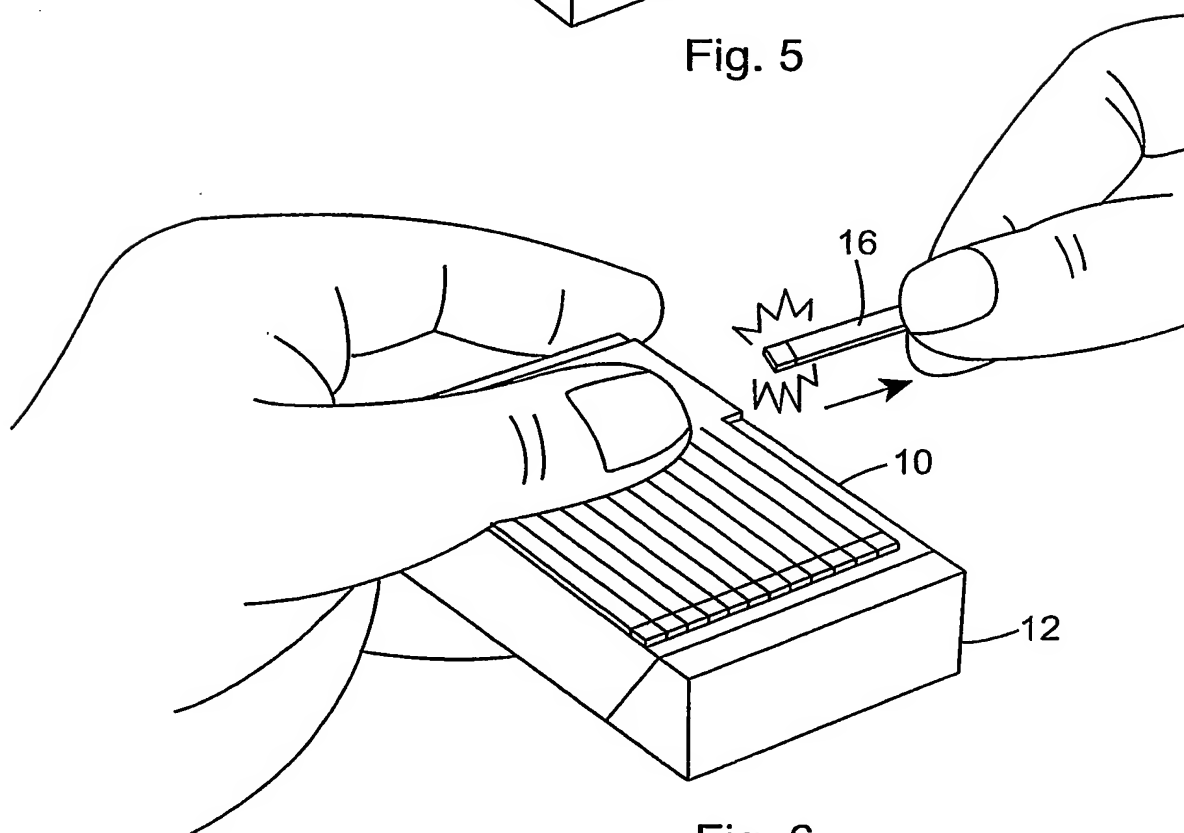


Fig. 6

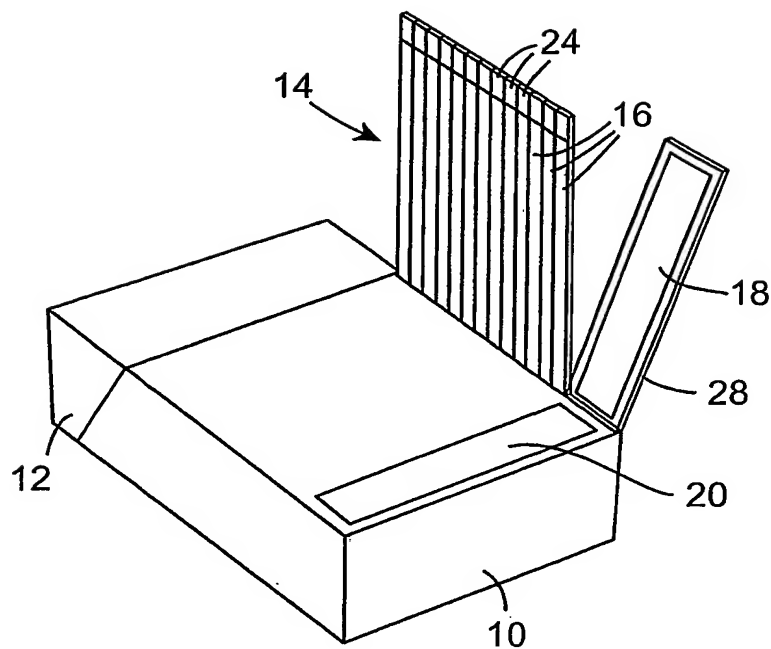


Fig. 7

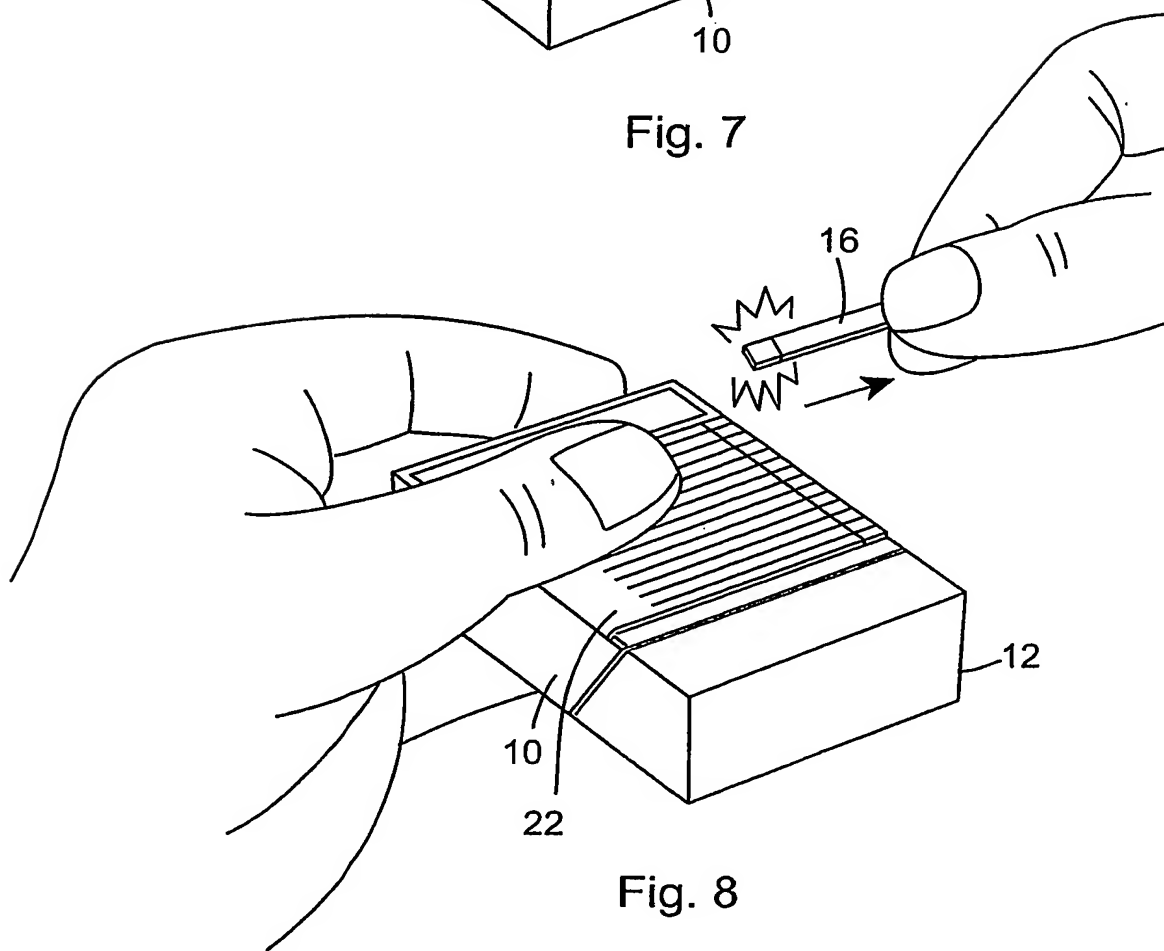


Fig. 8

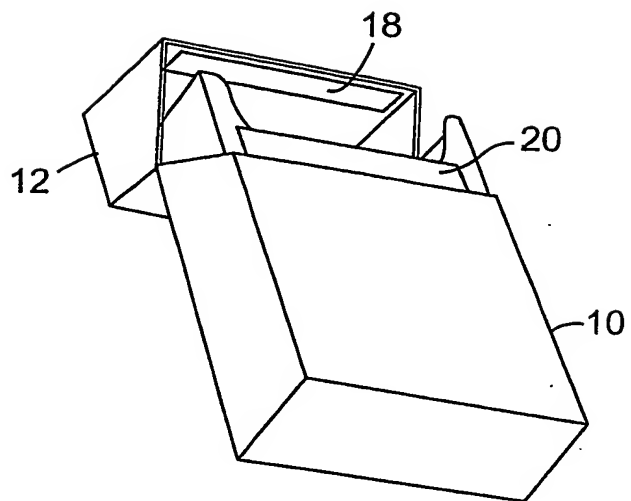


Fig. 9

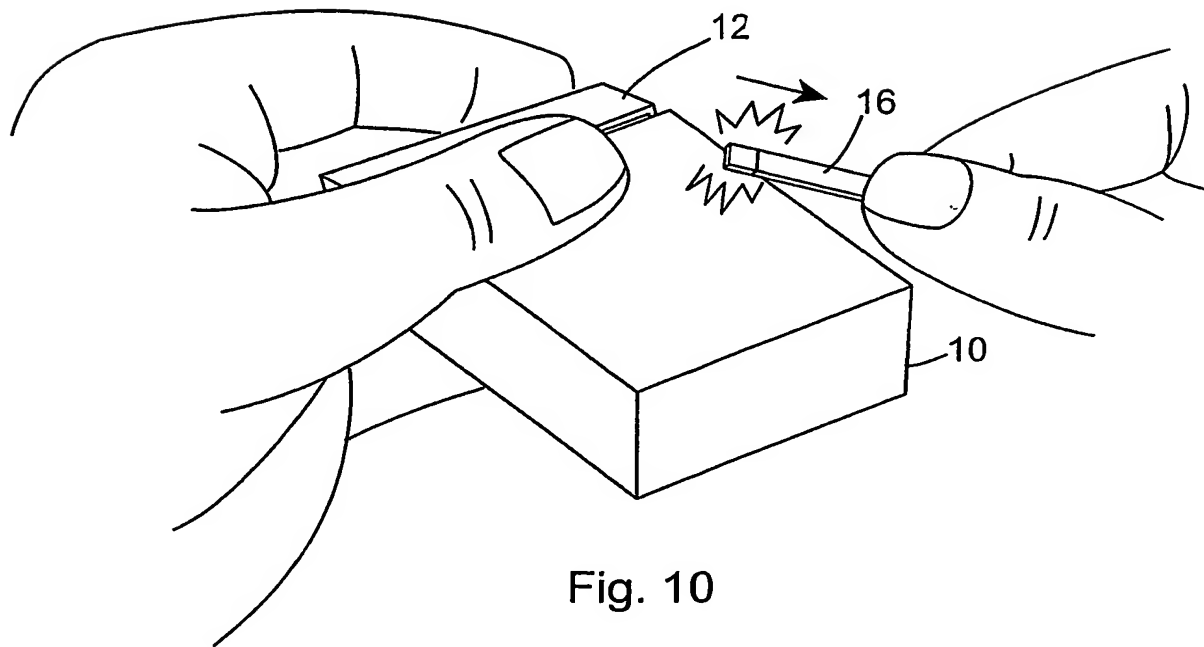


Fig. 10

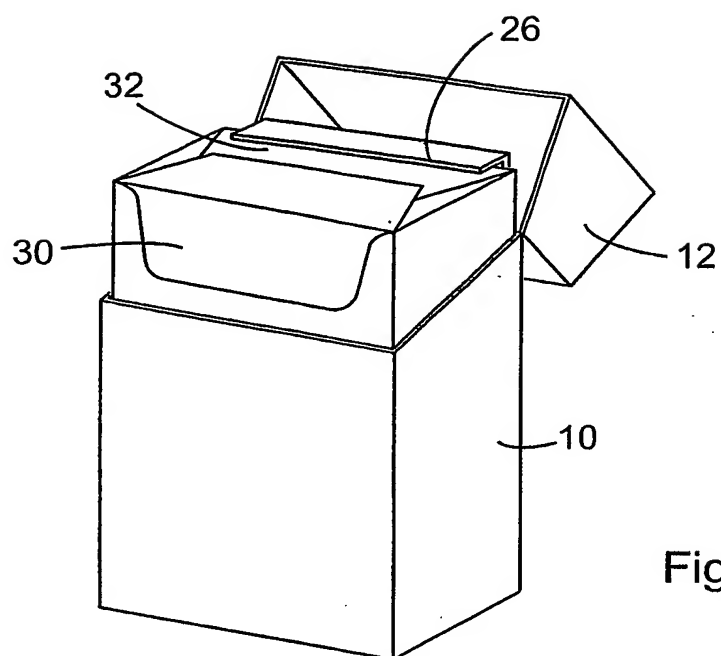


Fig. 11

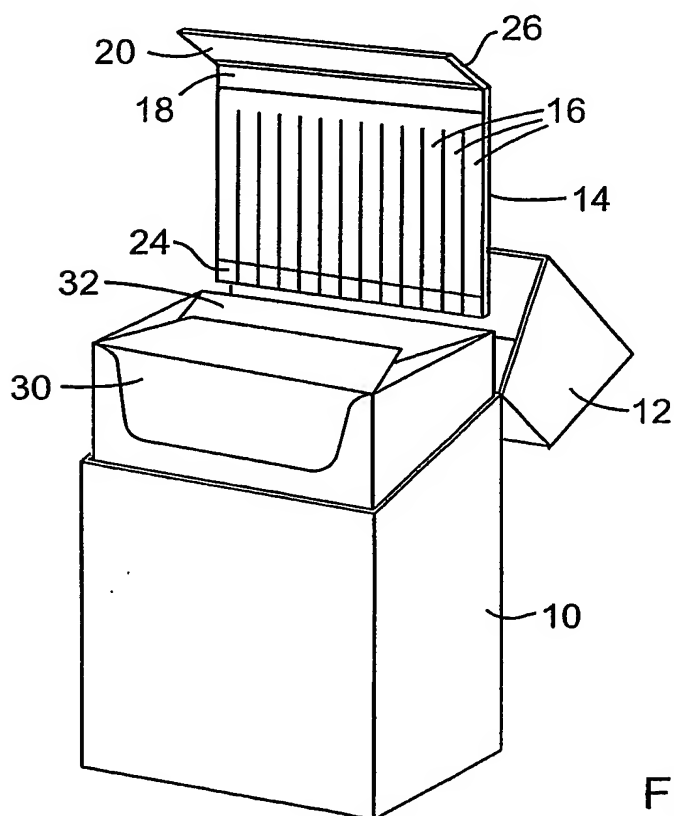


Fig. 12

INTERNATIONAL SEARCH REPORT

PCT/GB2004/004055

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B65D85/10 A24F27/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B65D. A24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 19 28 451 U (MUELLER HANS-JOSEF) 2 December 1965 (1965-12-02) the whole document	1-4, 6, 8, 9
X	US 4 058 208 A (LUND OWEN H) 15 November 1977 (1977-11-15) figures	1-3, 8
X	US 1 849 432 A (MORIYA SABURO M) 15 March 1932 (1932-03-15) the whole document	1-3, 8
X	NL 38 871 C (PATENTZÜNDER UNION AG) 15 August 1936 (1936-08-15) page 1, line 48 - line 82; figures	1-3, 8
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the International search

8 December 2004

Date of mailing of the International search report

15/12/2004

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INTERNATIONAL SEARCH REPORT

PCT/GB2004/004055

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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US 4058208	A	15-11-1977	NONE	
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US 1918476	A	18-07-1933	NONE	